



Town of Merrimack, New Hampshire

Department of Public Works

P.O. Box 940

Merrimack, New Hampshire 03054 MAY 14 P 12: 08

12 Bishop Street

TEL: 603/424-5137

FAX: 603/424-3890

May 6, 2004

Certified Mail # 7002 0860 0007 6028 6462

U.S. Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

RE: NPDES PII Small MS4 General Permit NHRO41018
Annual Report No. 1 – March 03 – March 04

To Whom It May Concern:

Please find enclosed Page 1 of 15 with original signature. A photocopy of this page was inadvertently sent with our Annual Report package.

We apologize for any inconvenience this may have caused.

Very truly yours,

David C. Lent, P.E.
Asst. Director of Public Works/Hwy Division

EMC/rfs

Enclosure

cc: Ed Chase, P.E., Director of Public Works



Municipality/Organization: Town of Merrimack, NH

EPA NPDES Permit Number: NHR041018

Annual Report Number

& Reporting Period: No. 1: March 03-March 04 MAY 14 P 12: 08

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: David C. Lent, P.E.

Title: Assistant Director of Public Works

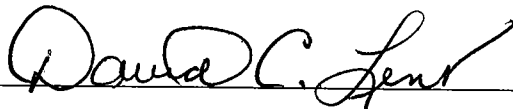
Telephone #: (603) 424-5137

Email: merhwy@isone.com

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:



Printed Name: David C. Lent

Title: Assistant Director of Public Works

Date: April 30, 2004



Town of Merrimack, New Hampshire

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P.O. Box 940
Merrimack, New Hampshire 03054

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CERTIFIED MAIL #7002 0860 0007 6028 6622

May 3, 2004

U.S. Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

RE: EPA NPDES Permit Number NHR041018
Annual Report No. 1

To Whom It May Concern:

Enclosed is the first annual report for activities completed by the Town of Merrimack for the year March 2003 through March 2004 relative to the referenced permit.

Very truly yours,

David C. Lent, P.E.
Assistant DPW Director

enclosure

cc: William Mulligan, Acting Town Manager
Edward Chase, P.E. DPW Director
Underwood Engineers, Inc.

2004 MAY - 7 A 10:3



Town of Merrimack uses recycled paper



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P.O. Box 940
Merrimack, New Hampshire 03054

12 Bishop Street
TEL: 603/424-5137
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CERTIFIED MAIL #7002 0860 0007 6028 6615

May 3, 2004

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, NH 03302-0095

RE: EPA NPDES Permit Number NHR041018
Annual Report No. 1

To Whom It May Concern:

Enclosed is the first annual report for activities completed by the Town of Merrimack for the year March 2003 through March 2004 relative to the referenced permit.

Very truly yours,

David C. Lent, P.E.
Assistant DPW Director

enclosure

cc: William Mulligan, Acting Town Manager
Edward Chase, P.E. DPW Director
Underwood Engineers, Inc.

2004 MAY -7 A 10:13



Town of Merrimack uses recycled paper

Part II. Self-Assessment

The Town of Merrimack has performed a self-assessment and has determined that our municipality has accomplished the majority of the goals set forth in our NOI. Work has not been completed regarding the impaired waters listed within the Town of Merrimack. The Town will continue to work with the Nashua Regional Planning Commission (NRPC) and the Souhegan River Local Advisory Committee (SoRLAC). It is our understanding that these entities have received grant funds from NHDES to develop a Souhegan River Watershed Management Plan. The SoRLAC, the NRPC and the Souhegan River Watershed Association will be working closely with the communities in the Souhegan River watershed to develop a management plan that is consistent with the goals of each community and to ensure that the plan provides a comprehensive action plan for the restoration, management and protection of the Souhegan River watershed. In addition, the Town will work with the Baboosic Lake Association that has already established an enhanced monitoring program using local volunteers to determine sources of nutrients in Baboosic Lake.

2004 MAY -7 A 10:14

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
1.1	Informational Brochures for Trash Management and Disposal of Hazardous Waste.	DPW	Develop brochure by Spring of 2004, distribute to all residents by fall of 2004.	Draft of informational brochure completed. Currently being edited prior to printing.	Print and distribute informational brochure to all residents.
Revised					
1.2	Classroom Education	DPW	Have guided tour program of the WWTF & Highway Garage available to students by end of year 1.	Conducted student tour of Highway Garage during fall of 2003.	Expand tour to WWTF and add classroom program at middle school.
Revised					
1.3	Advertisements promoting BMP's to air on local cable station	DPW	Create sleds and secure airtime by fall of 2004. Advertisements to run monthly at a minimum.	No action required on this item during year one.	Begin regular public service announcements local cable access channel.
Revised					
1.4	Educational pamphlets provided to new residents.	DPW	Distribution of educational materials to begin by end of year 1 and be continuous.	See item 1.1 above.	Distribute pamphlets.
Revised					
1.5	Storm water information provided on website	DPW	Develop website information, implement fall 2004	No action required on this item during year one.	Add storm water related information to DPW web page, fall 2004.
Revised					

1a. Additions

					Conservation Commission has scheduled Wetland Protection programs

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
2.1	Storm Drain Stenciling.	DPW	Stencil designed by year 1, 80% catch basins stenciled by end of year 2, stencil program to run annually.	Discussed possible logo options for stencil at staff meetings.	Develop stencil and apply at catch basins.
Revised					
2.2	Volunteer program for stream cleanup and water quality monitoring.	Community Development	Work of Souhegan & Lower Merrimack local advisory committees to be monitored by the Town. Monitoring Data to be included in annual report to EPA.	Conservation Commission and Watershed Association volunteers monitored dry weather flows on the Souhegan River. Data is not available for this report.	Continue to solicit volunteers to monitor other locations. Collect data from volunteers.
Revised					
2.3	Greenbelt Program.	Community Development	Greenbelt program is included in master plan, the Town is actively encouraging private participation.	The Town accepted the donation of an approx. 96-acre parcel with approx. $\frac{3}{4}$ mile of shoreline along the Souhegan River. Deed restrictions are geared toward protection of the river.	Continue to encourage private participation.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
2.4	Support Watershed Organization.	Community Development	Town will continue to solicit applicants for appointment with the local watershed organizations.	Continued solicitation of volunteers through web site postings and media.	Continue solicitation.
Revised					
2.5	Develop system for public communication.	DPW	Appoint contact person and establish communication methods by fall 2004.	A contact person has been designated at DPW. (Assistant DPW Director/Highway)	Develop public communication of contact procedure.
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
3.1	Preparation of Master Drainage Map (delineation of municipal storm sewer system, drainage basins, outfalls & receiving waters).	DPW	Master Drainage Map is prepared by end of year 4. Map is modified as needed annually.	DPW staff met with consultant to develop RFP for base mapping. Established budget for mapping and secured Town Meeting approval for year one and two expenditures.	Select mapping firm and sign contract for base mapping.
Revised					
3.2	Storm sewer bylaw.	DPW	Storm sewer bylaw in place by year 3.	No action required this year for this item.	Begin drafting document.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
Revised					
3.3	Qualitative observation of discharge at outfalls.	DPW	100% major outfalls from developed areas are screened for pollutants by end of year 2.	No action required this year for this item.	Screen major outfalls.
Revised					
3.4	Dry weather screening of outfalls.	DPW	100% major outfalls from developed areas are screened for dry weather flows pollutants by end of year 1.	NHDES visited outfalls along the Souhegan River. Data is not available for this report.	Screen outfalls as described.
Revised					
3.5	Develop program for the elimination of illicit discharges, if applicable.	DPW	Eliminate all known illicit discharges by end of Year 5, first permit period.	No action required this year for this item.	Tabulate any illicit discharges identified in 3.3 and 3.4 above. Work towards identifying sources.
Revised					

3a. Additions

4. Construction Site Storm water Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
4.1	Implement by fall of 2005.	Community Development	Preparation of Town Ordinance to address: BMP erosion & sediment controls for all new construction, preparation of SWPPPs for land disturbances greater than 1 acre, building setbacks from waters of the state and disposal of discarded building materials	The Community Development Department has contracted with a consultant to update BMP's required for new construction.	Continue developing ordinance.
Revised					
4.2	Implement by fall of 2005.	Community Development	Develop procedures for Site Inspection, enforcement and penalties for non-compliance	Community Dev. Dept. and DPW jointly inspect erosion control on new construction and work with violators to make corrections. Established weekly coordination meetings with two Departments.	Continue monitoring and enforcement.
Revised					
4.3	Appoint contact person and establish communication methods by fall of 2005.	Community Development	Develop system for public communication (for reporting violations)	Contact person is available at the Community Development office.	Develop public awareness of reporting procedures.
Revised					

4a. Additions

5. Post-Construction Storm water Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
5.1	Revision to Town Site Plan and Subdivision review regulations to address: Structural BMP's for land disturbances greater than 1 acre, and perpetual maintenance of BMP's.	Community Development	Regulations to be revised and adopted by fall of 2004.	A draft revision of the regulations has been prepared and is being reviewed by the appropriate boards and staff.	Adopt appropriate revisions.
Revised					
5.2	Develop procedures for review of structural BMP's	Community Development	To be part of revised regulations by fall 2004.	See 5.1 above.	See 5.1 above.
Revised					
5.3	Promote open drainage systems and groundwater recharge through infiltration systems.	Community Development	To be part of revised regulations by fall 2004.	See 5.1 above	See 5.1 above
Revised					
5.4	Develop procedures for site inspection and enforcement.	Community Development	Internal inspection procedures in place by fall of 2004.	Inspection by staff is on going.	Develop a written policy.
Revised					

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
6.1	Prepare Operation and Maintenance program for storm sewer system		33% of structures are cleaned and inspected each year. O&M plan developed by end of year 3. Plan to be revised as necessary.	At least 33% of structures were cleaned. Two DPW supervisors attended training to establish a storm water infrastructure inventory and maintenance database. Developed a data input form for database.	Train additional employees on database software. Continue inspection and cleaning of drainage structures.
Revised					
6.2	Implement Employee Training Program to include: vehicle maintenance, building maintenance, oil recycling policy, calibration of salt spreaders, hazardous material storage, spill response and prevention, and erosion control for new construction.		Employee Training program to be developed by end of year 1, and conducted annually for all DPW employees.	Completed second annual training program for employees at the Highway Garage.	Continue annual training. Training consultant to provide more site-specific training.
Revised					

6a. Additions

7. BMPs for Meeting Total Maximum Daily Load (TMDL) (Souhegan River, Merrimack River and Baboosic Lake)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
7.1	Qualitative Observation of Outfall Discharge	DPW	Determine Outfall Locations & Screen for pollutants by year 1	Located outfalls along Baboosic Brook, Souhegan River, and Naticook Brook. Took pictures at outfalls and noted possible sediment sources.	Complete inventory of outfalls and complete screening.
Revised					
7.2	Dry Weather Screening of Outfall	DPW	Screen outfall during dry weather flows by end of year 1	Item not completed this year.	Complete screening.
Revised					
7.3	Develop Program for elimination of illicit discharges within drainage area of outfall, if applicable	DPW	Eliminate illicit discharge, if found and if applicable	No action this year.	Work toward eliminating any illicit discharges identified by screening.
Revised					

Note: The Baboosic Lake Association has established an enhanced monitoring program using local volunteers to determine sources of nutrients. The measurable goal for this TMDL is to coordinate with Local Lake Association by end of year 1 to discuss ongoing sampling efforts and possible Town involvement.

7a. Additions

Part IV. Summary of Information Collected and Analyzed

No data was collected or available for analysis for this report. Data collection should begin in July and August of 2004.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

The Town has chosen not to complete this section for year one due to limited data.

Storm water management position created/staffed	(y/n)	
Annual program budget/expenditures	(\$)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	
Storm water management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	

Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Storm water Management				
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Storm water Management				

Mapping and Illicit Discharges

Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	

Outfalls inspected/screened	(# or %)	
Illicit discharges identified	(#)	
Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	
Site inspections completed	(# or %)	
Tickets/Stop work orders issued	(# or %)	
Fines collected	(# and \$)	
Complaints/concerns received from public	(#)	

Post-Development Storm water Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction storm water control	(%)	
Site inspections completed	(# or %)	
Estimated volume of storm water recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	
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Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	
Total number of structures cleaned	(#)	
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	(\$)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl	
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	% Sand	
Pre-wetting techniques utilized	(y/n)	
Manual control spreaders used	(y/n)	
Automatic or Zero-velocity spreaders used	(y/n)	
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	
Storage shed(s) in design or under construction	(y/n)	